

June 7, 2019

Eric Winiecki
Project Coordinator
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

Re: Yakima Valley Dairies – Docket No. SWDA-10-2013-0080
Completion of Abandonment at Lagoon 9 at H&S Bosma Dairy

Dear Eric,

This letter is provided on behalf of Liberty Dairy, LLC, and its associated dairy facility, H&S Bosma Dairy (collectively, the Dairies).

This letter provides an update regarding the progress of the abandonments of Lagoons 8, 9, 19 and 20 at the Dairies, supplementing our previous submittals to you and our conversations during our weekly progress call. As noted in our letter dated May 31st, lagoons 19 and 20 have been completed.

We received the compliance monitoring data for Lagoon 9 today (attached). All four of the sidewalls and the lagoon bottom sample comply with the EPA-approved abandonment criteria (45 mg N/kg as the sum of ammonium-nitrogen and nitrate-nitrogen). No further excavation was required, and abandonment of that lagoon is complete.

Excavation of re-worked organic-rich soils is nearly complete for lagoon 8. We anticipate that initial compliance sampling will be conducted Monday of next week. If required based on compliance monitoring data, additional sampling and analysis will be conducted and additional material will be removed as necessary to meet the criteria contained in the EPA-approved abandonment plan.

We will continue to provide updates to you as part of our weekly teleconferences.

Thank you for your assistance with this matter. Please do not hesitate to contact me if you have any questions or concerns. It has been a pleasure working with you on this project.

Sincerely,

A handwritten signature in black ink, appearing to be 'Mark', followed by a long horizontal line.

Mark Larsen
Anchor QEA, LLC

cc:

Josh Sexton, Anchor QEA, LLC
Henry Bosma, Liberty Dairy, LLC
Rene Fuentes, U.S. Environmental Protection Agency
Jennifer MacDonald, U.S. Environmental Protection Agency
Lucy Edmonson, U.S. Environmental Protection Agency
Bill Dunbar, U.S. Environmental Protection Agency
Ed Kowalski, U.S. Environmental Protection Agency
Patrick W. Ryan, Perkins Coie LLP

Attachments:

Table 1. Summary of Confirmation Sampling Results
Attachment 1. Confirmation Sampling Analytical Data Packages

Table 1. Summary of Confirmation Sampling Results
H&S Bosma - Lagoon Abandonments
Lagoon 9

Lagoon 9 Compliance Monitoring Data								Analytical Data Package		
Location	Location ID	Depth (ft)	NH4 - N (mg/kg)	NO3 - N (mg/kg)	Sum - N (mg/kg)	Status	Notes	Sample ID	Sample Date	Data Received
East Side Slope	S01	0-1	ND	5.6	5.6	Pass	Complete	BOS-L09-S01-1-20190530	5/30/2019	6/7/2019
North Side Slope	S02	0-1	ND	29.5	29.5	Pass	Complete	BOS-L09-S02-1-20190530	5/30/2019	6/7/2019
West Side Slope	S03	0-1	ND	1.1	1.1	Pass	Complete	BOS-L09-S03-1-20190530	5/30/2019	6/7/2019
South Side Slope	S04	0-1	ND	0.6	0.6	Pass	Complete	BOS-L09-S04-1-20190530	5/30/2019	6/7/2019
Bottom	B01	0-1	ND	29.2	29.2	Pass	Complete	BOS-L09-B01-1-20190530	5/30/2019	6/7/2019

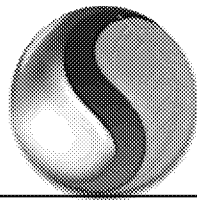
Notes:

Results are preliminary unvalidated data. Validated data will be included in the completion report.

ND - Not detected

ATTACHMENT 1

CONFIRMATION SAMPLING ANALYTICAL DATA PACKAGES



soiltest
farm consultants, inc.

2925 Driggs Dr., Moses Lake, WA 98807 • www.soiltestlab.com
Office: (509)785-1822 • Fax: (509)785-6314 • (509)784-1822



ANCHOR QEA

1201 3rd AVE. STE 2600

SEATTLE, WA 98101

Laboratory #: S19-08354

Date Received: 6/4/2019

Grower: ANCHOR QEA

Sampled By:

Field: BOS-L09-B01-1-20190530

Customer Account #:

Customer Sample ID:

Soil Test Results

pH 1:1

E.C. 1:1 m.mhos/cm

Est Sat Paste E.C. m.mhos/cm

Effervescence

Ammonium - N mg/kg ND (u)

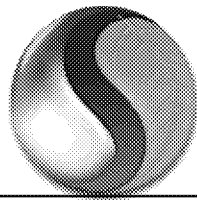
Organic Matter W.B. %

Depth inches	Nitrate-N mg/kg	Sulfate-S mg/kg	Moisture Inches
0 - 12	29.2		
Totals	29.2		

Other Tests:

We make every effort to provide an accurate analysis of your sample. For reasonable cause we will repeat tests, but because of factors beyond our control in sampling procedures and the inherent variability of soil, our liability is limited to the price of the tests. Recommendations are to be used as general guides and should be modified for specific field conditions and situations. Note: "u" indicates that the element was analyzed for but not detected

This is your Invoice #: S19-08354 Account # 110340 Reviewed by: B.Thyssen, CP List Cost: \$42.00



soiltest
farm consultants, inc.

2925 Driggs Dr., Moses Lake, WA 98807 • www.soiltestlab.com
Office: (509)785-1822 • Fax: (509)785-6314 • (509)784-1822



ANCHOR QEA
1201 3rd AVE. STE 2600

SEATTLE, WA 98101

Laboratory #: S19-08355

Date Received: 6/4/2019

Grower: ANCHOR QEA

Sampled By:

Field: BOS-L09-S01-1-20190530

Customer Account #:

Customer Sample ID:

Soil Test Results

pH 1:1

E.C. 1:1 m.mhos/cm

Est Sat Paste E.C. m.mhos/cm

Effervescence

Ammonium - N mg/kg ND (u)

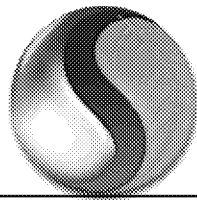
Organic Matter W.B. %

Depth inches	Nitrate-N mg/kg	Sulfate-S mg/kg	Moisture Inches
0 - 12	5.6		
Totals	5.6		

Other Tests:

We make every effort to provide an accurate analysis of your sample. For reasonable cause we will repeat tests, but because of factors beyond our control in sampling procedures and the inherent variability of soil, our liability is limited to the price of the tests. Recommendations are to be used as general guides and should be modified for specific field conditions and situations. Note: "u" indicates that the element was analyzed for but not detected

This is your Invoice #: S19-08355 Account # 110340 Reviewed by: B.Thyssen, CP List Cost: \$42.00



soiltest
farm consultants, inc.

2925 Driggs Dr., Moses Lake, WA 98807 • www.soiltestlab.com
Office: (509)785-1822 • Fax: (509)785-6314 • (509)784-1822



ANCHOR QEA

1201 3rd AVE. STE 2600

SEATTLE, WA 98101

Laboratory #: S19-08356

Date Received: 6/4/2019

Grower: ANCHOR QEA

Sampled By:

Field: BOS-L09-S02-1-20190530

Customer Account #:

Customer Sample ID:

Soil Test Results

pH 1:1

E.C. 1:1 m.mhos/cm

Est Sat Paste E.C. m.mhos/cm

Effervescence

Ammonium - N mg/kg ND (u)

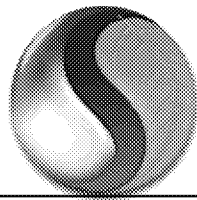
Organic Matter W.B. %

Depth inches	Nitrate-N mg/kg	Sulfate-S mg/kg	Moisture Inches
0 - 12	29.5		
Totals	29.5		

Other Tests:

We make every effort to provide an accurate analysis of your sample. For reasonable cause we will repeat tests, but because of factors beyond our control in sampling procedures and the inherent variability of soil, our liability is limited to the price of the tests. Recommendations are to be used as general guides and should be modified for specific field conditions and situations. Note: "u" indicates that the element was analyzed for but not detected

This is your Invoice #: S19-08356 Account # 110340 Reviewed by: B.Thyssen, CP List Cost: \$42.00



soiltest
farm consultants, inc.

2925 Driggs Dr., Moses Lake, WA 98807 • www.soiltestlab.com
Office: (509)785-1822 • Fax: (509)785-6314 • (509)784-1822



ANCHOR QEA

1201 3rd AVE. STE 2600

SEATTLE, WA 98101

Laboratory #: S19-08357

Date Received: 6/4/2019

Grower: ANCHOR QEA

Sampled By:

Field: BOS-L09-S03-1-20190530

Customer Account #:

Customer Sample ID:

Soil Test Results

pH 1:1

E.C. 1:1 m.mhos/cm

Est Sat Paste E.C. m.mhos/cm

Effervescence

Ammonium - N mg/kg ND (u)

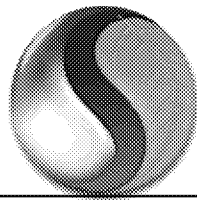
Organic Matter W.B. %

Depth inches	Nitrate-N mg/kg	Sulfate-S mg/kg	Moisture Inches
0 - 12	1.1		
Totals	1.1		

Other Tests:

We make every effort to provide an accurate analysis of your sample. For reasonable cause we will repeat tests, but because of factors beyond our control in sampling procedures and the inherent variability of soil, our liability is limited to the price of the tests. Recommendations are to be used as general guides and should be modified for specific field conditions and situations. Note: "u" indicates that the element was analyzed for but not detected

This is your Invoice #: S19-08357 Account # 110340 Reviewed by: B.Thyssen, CP List Cost: \$42.00



soiltest
farm consultants, inc.

2925 Driggs Dr., Moses Lake, WA 98807 • www.soiltestlab.com
Office: (509)785-1822 • Fax: (509)785-6314 • (509)784-1822



ANCHOR QEA

1201 3rd AVE. STE 2600

SEATTLE, WA 98101

Laboratory #: S19-08358

Date Received: 6/4/2019

Grower: ANCHOR QEA

Sampled By:

Field: BOS-L09-S04-1-20190530

Customer Account #:

Customer Sample ID:

Soil Test Results

pH 1:1

E.C. 1:1 m.mhos/cm

Est Sat Paste E.C. m.mhos/cm

Effervescence

Ammonium - N mg/kg ND (u)

Organic Matter W.B. %

Depth inches	Nitrate-N mg/kg	Sulfate-S mg/kg	Moisture Inches
0 - 12	0.6		
Totals	0.6		

Other Tests:

We make every effort to provide an accurate analysis of your sample. For reasonable cause we will repeat tests, but because of factors beyond our control in sampling procedures and the inherent variability of soil, our liability is limited to the price of the tests. Recommendations are to be used as general guides and should be modified for specific field conditions and situations. Note: "u" indicates that the element was analyzed for but not detected

This is your Invoice #: S19-08358 Account # 110340 Reviewed by: B.Thyssen, CP List Cost: \$42.00